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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,873	01/16/2004	Kraig A. Kirschner	7234-111N1	8423

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FULBRIGHT AND JAWORSKI L L P
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EXAMINER	
BRITTAIN, JAMES R	

ART UNIT	PAPER NUMBER
3677	

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/759,873	KIRSCHNER, KRAIG A.	
	Examiner	Art Unit	
	James R. Brittain	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 September 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. patent 6749359 in view of Rebentisch (US 4784552). Although the conflicting claims are not identical, they are not patentably distinct from each other because patent claim 1 includes the steel web joist including a beam with two angle elements, an anchor plate, an engagement plate and stud. While patent claim 1 describes the engagement plate as having an engagement profile, the profile is described in detail as having a tapered tongue and diverging shoulders and pending claim 1 does not detail the structure of the engagement profile, the broad recitation of an engagement profile in pending claim 1 is obvious over the detailed structure of the engagement profile of patent claim 1 because it performs the same function. Further, pending claim 1 recites the upstanding portions as being at an obtuse angle substantially greater than 90 degrees. While patent claim 2, recites the upstanding engagement portion being at an obtuse angle, it does not state that the obtuse angle is substantially greater than 90 degrees. It would have been obvious to modify the claimed structure of Patent No. 6749359 to have the upstanding portions extend at an obtuse angle substantially greater than 90 degrees in view of Rebentisch (US 4784552) (figures 2, 3) teaching the upstanding engagement portions 24 extending at an obtuse angle substantially greater than 90 degrees

from the flat anchor portion so as to form a biting edge to grip the legs 26 to thereby more securely hold the engagement plate to the channel and prevent it from moving (col. 2, lines 41-48), a significant advantage to maintain the correct position of the connection. In regard to pending claim 2, patent claim 2 suggests this subject matter. As to pending claim 3, patent claim 3 suggests the tongue and shoulders as indicated above, thereby rendering obvious the subject matter of this claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 2 are rejected under 35 U.S.C. §103(a) as being unpatentable over applicant's description of the prior art as described in the information disclosure statement received July 30, 2001 in parent application 09/844807 and made of record in this application in view of Koyama (US 5259165) and Rebentisch (US 4784552).

Applicant's description of the prior art is described in the information disclosure statement received July 30, 2001 in parent application 09/844807 and made of record in this application. Therein applicant describes how the AFCON Flyer 962 square washer is utilized by stating that "This washer is prior art to the present invention and has been employed in the prior art in pairs with a threaded shaft extending therebetween, held by nuts where the washers are placed above and below a cord space in the upper beam of a steel web joist such as disclosed in the resent application. Hangers have been coupled with the shaft extending between the washers. This coupling is typically below the lower washer and is

held in place by the nut threaded onto the shaft." Thus applicant has described a seismic suspension system with a steel web joist such as disclosed in this application with the two angle elements, each having a first leg and a second leg, the first legs being parallel with a cord space therebetween and the second legs extending in opposite direction, an anchor plate and an engagement plate placed respectively above and below the cord space with the anchor plate held in juxtaposition with the second legs and the engagement plate held against the edges of the first legs by nuts upon a threaded shaft. The threaded shaft extends below the engagement plate and can receive a hanger, which is secured by the lower nut. The prior art described by applicant fails to provide the engagement plate with upstanding engagement portions to either side of the flat anchor portion, the engagement plate extending across the cord space with each upstanding engagement portion having a distal edge with an engagement profile in interlocking engagement with the first legs wherein each engagement portion being at an obtuse angle substantially greater than 90 degrees to the flat anchor portion. However, Koyama (figures 3, 4 and claims 1 and 3-6) teaches a similar suspension system and further suggests in combination the steel web joist including a beam with two angle elements 4, each having a first leg and a second leg, the first legs being parallel with a cord space therebetween and the second legs extending in opposite directions; an anchor plate 2 having a first hole 2g therethrough; an engagement plate 3 including a flat anchor portion 3c having a second hole 3g therethrough and upstanding engagement portions 3a, 3b to either side of the flat anchor portion 3c, the engagement plate 3 extending across the cord space opposite the anchor plate 2, the upstanding engagement portion 3a having a distal edge with an engagement profile defined by central tongue 3e extending between the shoulders 3d, the other upstanding engagement portion 3b has a distal edge with an engagement profile defined by central tongue 3f which interlocks the engagement portion 3b between the first legs so that it will not move laterally to either the left or right as shown in figure 4.

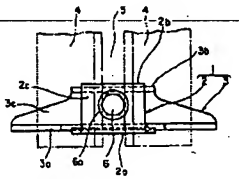

Figure 3

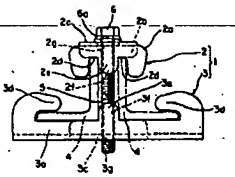

Figure 4

The engagement plate securely interlocks the first legs together by contacting the first legs between the second legs by the tongue 3e. Applicant indicates the structure that provides interlocking engagement in the specification [0007] by stating "In a second separate aspect of the present invention, the engagement plate includes distal edges with tongues extendible to between the parallel legs of the steel web joist beam for interlocking engagement." This establishes that all that is required for interlocking engagement is that the engagement plate distal edges include tongues extendible between the parallel legs of the web joist and Koyama provides such structure in tongues 3e and 3f. While the last sentence of [0007] states, "Shoulders to either side of each tongue may abut against the edges of the legs", the use of the term "may" indicates that the shoulders are not required for interlocking engagement to exist. A stud extends from the first hole 3g to and beyond the second hole 2g, the stud is adapted to secure the anchor plate and the engagement plate to the beam of the steel web joist. The bolt acts as a support for an object suspended therefrom as indicated in claims 3-6 of Koyama. The tongues 3e and 3f are sandwiched by the first legs and act to hold the angle elements at a given interval (col. 3, lines 11-15) and thereby provide better dimensional stability to the beam thereby providing an engineering advantage. Applicant is reminded that "[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968). The Koyama reference would suggest to one of ordinary skill in the art that the engagement plate 3 would be prevented from lateral movement by the tongues 3e, 3f being interlocked between the first legs

and therefore have the benefit of maintaining the threaded shaft in a position that prevents lateral movement of the attachment while also contributing to the greater dimensional stability of the beam. Further, Rebentisch (US 4784552) (figures 2, 3) teaching the upstanding engagement portions 24 extending at an obtuse angle substantially greater than 90 degrees from the flat anchor portion so as to form a biting edge to grip the legs 26 to thereby more securely hold the engagement plate to the channel and prevent it from moving (col. 2, lines 41-48), a significant advantage to maintain the correct position of the connection. Accordingly, it would have been obvious to modify the prior art described in the information disclosure statement received July 30, 2001 in parent application 09/844807 and made of record in this application to include upstanding engagement portions to either side of the flat anchor portion, the engagement plate extending across the cord space with each upstanding engagement portion having a distal edge with an engagement profile in interlocking engagement with the first legs as shown in Koyama so as prevent lateral movement of the engagement plate while also providing for greater dimensional stability of the beam and as to each upstanding engagement portion being at an obtuse angle substantially greater than 90 degrees to the flat anchor portion Rebentisch teaches that it would have been further obvious to have the upstanding engagement portions 24 extending at an obtuse angle substantially greater than 90 degrees from the flat anchor portion so as to form a biting edge to grip the legs 26 to thereby more securely hold the engagement plate to the channel and prevent it from moving (col. 2, lines 41-48), a significant advantage to maintain the correct position of the connection.

As to claim 2, the prior art as described in the information disclosure statement received July 30, 2001 in parent application 09/844807 and made of record in this application utilizes a nut to hold the square anchor plate in the form of the 962 square washer in place and fails to state that hole in the anchor plate itself can be threaded. However, Koyama recognizes the equivalence of a separate nut to secure the plate and a threaded aperture to secure a plate thereby providing a strong secure connection in the passage found in column 4, lines 23-28.

> *"According to the first embodiment, the fixing member 6 is screwed into the screw hole 3g defined on the lower metal fitting 3. However, the lower metal fitting 3 may have a small hole 3h therein through which the fixing member 6 is inserted and fixed by a nut 6b by way of a washer 6a as illustrated in FIG. 8. "*

Accordingly, it would have been obvious to modify the anchor plate as described in the information disclosure statement received July 30, 2001 so that the hole itself is threaded in view of Koyama teaching that this is an equivalent desirable structure to having a separate nut in providing a strong connection.

Claim 3 is rejected under 35 U.S.C. §103(a) as being unpatentable over applicant's description of the prior art as described in the information disclosure statement received July 30, 2001 in view of Koyama (US 5259165) and Rebentisch (US 4784552) as applied to claim 1 above, and further in view of Steinke (US 4408928).

Further modification suspension system described by applicant as prior art so that the engagement plate suggested by Koyama has shoulders sandwiching the tongue, not just on one engagement portion, but on both would have been obvious in view of Steinke (figures 2-5) teaching that it is desirable to enhance the interlocking engagement by having shoulders 57 on each upstanding engagement portions so as to have a better interlocking securement (col. 5, lines 6-10).

Response to Arguments

Applicant's arguments filed September 7, 2004 have been fully considered but they are not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary

skill in the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and In re Jones, 958 F.2d 347, 21 USPQ 2d 1941 (Fed. Cir. 1992). In this case, Koyama teaches the use of tongues 3e, 3f sandwiched between the first legs and act to hold the angle elements at a given interval (col. 3, lines 11-15) and thereby provide better dimensional stability to the beam and provide an engineering advantage. This is a clear suggestion to provide an enhanced structure since dimensional stability is obviously desirable and if applicant believes that maintaining dimensional stability is not of similar importance in a seismic adaptor then applicant should indicate why dimensional stability as specifically indicated by Koyama is of no concern to him. There are strong engineering safety concerns that would make dimensional stability desirable so that the building structures perform predictably under stress and are prevented as much as possible from failing when dimensional stability no longer exists. Koyama indicates the tongues exist for maintaining the angle elements at a given interval and such is a requirement for good safety and applicant has not reached a nonobvious result in the scope of these claims from the arguments provided. Koyama clearly realized the use of tongues between the angles provides dimensional stability. Similarly, Rebentisch provides for the upstanding engagement portions 24 extending at an obtuse angle substantially greater than 90 degrees from the flat anchor portion so as to form a biting edge to grip the legs 26 to thereby more securely hold the engagement plate to the channel and prevent it from moving (col. 2, lines 41-48). This provides a clear statement that it is desirable to have an obtuse angle so as to maintain the position of the fastener and clearly this is a desirable result. Applicant argues that the lack of original disclosure of advantages presented in the arguments is of no import (page 6, ¶1). Applicant's assertion is based upon the argument that flexibility of the plate to greater or lesser amounts is an advantage and applicant provides the mechanism by which this advantage can be realized. Obviously, a "plate" no matter what its configuration can be simply recited and it can be resilient or not resilient. Any argument can be presented for any structural plate to indicate an advantage to resilience just as well as an argument to indicate an advantage for a rigidity so as to maintain

dimensional stability and a fixed location. Applicant's disclosure has no basis for the plate being resilient and if it is of such importance then applicant should so claim it and indicate the antecedent basis in the application as filed. Koyama and Rebentisch respectively explicitly state that they provide greater lateral stability by maintaining the interval between the angle elements and improved fixed location of the fastener and are the motivation and reasons to combine the references.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Brittain whose telephone number is (703) 308-2222. The examiner can normally be reached on M-F 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (703) 306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James R. Brittain
Primary Examiner
Art Unit 3677

JRB